

Capital Improvements Joint Bond Review Committee

HUGH K. LEATHERMAN, SR.
SENATE
CHAIRMAN

G. MURRELL SMITH, JR.
HOUSE OF REPRESENTATIVES
VICE CHAIRMAN

SENATE MEMBERS
HUGH K. LEATHERMAN, SR.
HARVEY S. PEELER, JR.
THOMAS C. ALEXANDER
PAUL G. CAMPBELL, JR.
GLENN G. REESE

F. RICHARD HARMON, JR.
DIRECTOR OF RESEARCH
SFAA LIAISON
803-212-6682

HOUSE MEMBERS
G. MURRELL SMITH, JR.
GILDA COBB-HUNTER
LEONIDAS E. STAVRINAKIS
J. GARY SIMRILL



MARY KATHERINE ROGERS
ADMINISTRATIVE ASSISTANT
803-212-6677
FAX: 803-212-6690

JBRC BROADBAND OVERSIGHT SUBCOMMITTEE

Senator Thomas C. Alexander, Representative Gilda Cobb Hunter, Co-Chairs
Senator Paul G. Campbell, Jr., Representative J. Gary Simrill, Members

Tuesday, October 20, 2020 1:00 p.m.
Virtual via Videoconference

AGENDA

PAGE

1. Introductory Remarks of the Co-Chairs and Members
2. Presentation of South Carolina Office of Regulatory Staff1
 Status of Funding, Update on Mapping Survey
 Ms. Nanette S. Edwards, Esquire, Executive Director
3. Presentation of South Carolina Educational Television Commission4
 Overview of Datacasting Program
 Mr. Anthony Padgett, President and Chief Executive Officer
 Dr. Stephanie Frazier, Vice President for Education
4. Presentation of South Carolina Department of Commerce17
 Broadband Grant Program Proposal
 Ms. Jennifer Noel Fletcher, Deputy Secretary
5. Discussion of Next Steps
6. Future Meeting

THE OFFICE OF REGULATORY STAFF

Act 142

Report Date: 10/15/2020



Max Authorized Spend \$ 50,000,000

Funds Committed - Wireless & Wired Service		
Allocation	\$	20,000,000
Wireless Service	\$	13,137,121
Wired Service	\$	693,073
Total Funds Committed	\$	13,830,194
Funds Remaining	\$	6,169,806

Funds Committed - Broadband Infrastructure & Mapping		
Allocation	\$	30,000,000
Planning	\$	6,000
Mapping	\$	299,900
Broadband Infrastructure	\$	25,582,969
Total Funds Committed	\$	25,888,869
Funds Remaining	\$	4,111,131

ORS Internal Expenses Related to Act 142		
Projected Expenses	\$	381,521.00

Total Funds Remaining	\$	9,899,416
-----------------------	----	-----------

Funds Expended		
Total Funds Expended	\$	6,274,708.16

Statistics		
Number of Participants		
Public K-12		82
Private K-12		4
Charter		3
Higher Ed Institutions		26
		115
Number of Hotspots / Wired Services Ordered		
Verizon (69.8%)		60,010
AT&T		24,642
T-Mobile		1,377
Service Only		390
Wired		6,175
		92,594
ORS Hours Expended		
Cumulative Hours	1	3,498

No Response to email or voicemail yet	
1	Atlantic Broadband (SC), LLC
	Atlantic Broadband (SC), LLC
	Acquisitions Cogeco Cable Holdings II Inc.
	Atlantic Broadband Finance, LLC
	Atlantic Broadband Enterprise, LLC
	Atlantic Broadband Finance, LLC
2	Birch Communications, Inc.
	Birch Communications, Inc.
3	County of Orangeburg
	County of Orangeburg
4	Crown Castle Fiber LLC
	Crown Castle Operating Company
5	Global Vision
	Dfjb, LLC
6	HNS License Sub, LLC
	dishNET Holding, LLC
7	Network Billing Systems LLC
	Fusion Connect Inc.
8	NetFortris Acquisition Co., Inc.
	NetFortris Acquisition Co., Inc.
9	PanTerra Networks Inc.
	PanTerra Networks, Inc.
10	Spectrotel, Inc.
	Spectrotel, Inc.
11	U.S. TelePacific Corp.
	U.S. TelePacific Holdings Corp.

Waiting for them to upload	
1	AT&T Corp, Inc.
	AT&T Corp.
	AT&T Mobility
	AT&T Corp.
	AT&T Services, Inc.
	AT&T Inc.
2	Charter Communications, Inc.
	Charter Communications
3	Comcast Cable Communications, LLC
	Comcast Corporation
4	OneTone Telecom, Inc.
	OneTone Telecom, Inc.
5	Knology of Alabama, Inc.
	WideOpenWest Finance, LLC
6	Broadview Networks Holdings, Inc.
	Windstream Holdings, Inc.
	Business Only Broadband
	Windstream Holdings, Inc.
	EarthLink Business, LLC
	Windstream Holdings, Inc.
	McLeod USA Telecommunications Services, L.L.C.
	Windstream Holdings, Inc.
	NuVox, Inc.
	Windstream Holdings, Inc.
	US LEC LLC
	Windstream Holdings, Inc.
	Windstream South Carolina, LLC
	Windstream Holdings, Inc.

No Service in SC	
1	AeroNet Wireless Broadband, LLC
	AeroNet Wireless Broadband, LLC
2	Asset Black, LLC
	Asset Black, LLC
3	At-Net Services, Inc.
	At-Net Services, Inc.
4	Bizvox Communications
	Bizvox Communications, Inc
5	California Internet, L.P. DBA GeoLinks
	California Internet
6	Cincinnati Bell Any Distance Inc.
	Cincinnati Bell Inc.
7	Gtek Communications
	Gtek Communications
8	IPacket Networks, LLC
	IPacket Networks, LLC
9	One Ring Networks, Inc.
	One Ring Networks, Inc.
10	Socket Telecom
	Socket Telecom, LLC
11	Southern Linc
	Southern Communications Services, Inc.
12	TailWind Voice & Data, Inc.
	Tailwind Voice & Data, Inc.
13	Telecomp Computer Services, Inc.
	Telecomp Computer Services, Inc.
14	Tower Cloud, Inc
	Uniti Group Inc.
15	MCI Communications Corporation
	Verizon Communications Inc.
16	Wisper ISP, LLC
	Wisper ISP, LLC.
17	Celito Communications, Inc.
	Celito Communicati+B2:B18ons, Inc.

Data Received	
1	APX Net, Inc
	APX Net, Inc.
2	ATG Communications
	ATG Communications, LLC
3	Bullseye Telecom, Inc.
	BullsEye Telecom, Inc.
4	Chester Telephone Company
	Chester Telephone Company

	Fairfield Communications, Inc.	Chester Telephone Company
5	CenturyLink Communications, LLC	CenturyLink, Inc.
	CenturyLink, Inc.	CenturyLink, Inc.
	Level 3 Communications, LLC	CenturyLink, Inc.
6	Comporium, Inc.	Comporium, Inc.
	Fort Mill Telephone Company	Comporium, Inc.
	Lancaster Telephone Company	Comporium, Inc.
	PBT Telecom, Inc.	Comporium, Inc.
7	Farmers Telephone Cooperative, Inc.	Farmers Telephone Cooperative, Inc. (SC)
	FTC Diversified Services, LLC	Farmers Telephone Cooperative, Inc. (SC)
8	Frontier Communications Corporation	Frontier Communications Corporation
9	Hargray of Georgia, Inc.	Hargray Communications Group, Inc.
	Hargray Telephone Co., Inc.	Hargray Communications Group, Inc.
10	Home Telephone ILEC, LLC d/b/a Home Telecom	Home Telephone Company, Inc. (SC)
11	Horry Telephone Cooperative, Inc	Horry Telephone Cooperative, Inc.
	Southern Coastal Cable, LLC	Southern Coastal Cable, LLC (HTC)
12	Hotwire Communications, Ltd.	Hotwire Communications, Ltd.
13	Northland Cable Television, Inc.	Northland Communications Corp.
14	NTInet, inc	NTInet Inc.
15	Palmetto Rural Telephone Cooperative Inc	Palmetto Rural Telephone Cooperative, Inc.
	Palmetto Telephone Communications, LLC	Palmetto Rural Telephone Cooperative, Inc.
16	Piedmont Rural Telephone Cooperative Inc	Piedmont Rural Telephone Cooperative, Inc.
	PRTCommunications, LLC	Piedmont Rural Telephone Cooperative, Inc.
17	Sandhill Connexions, LLC	Sandhill Telephone Cooperative, Inc.
	Sandhill Telephone Coop., Inc.	Sandhill Telephone Cooperative, Inc.
18	SCANA Communications, Inc.	SEGRA
	SEGRA	SEGRA
19	Chesnee Telephone Company, Inc. d/b/a Chesnee Communications	Skyline Telephone Membership Corporation
20	U.S. Cellular	Telephone and Data Systems
	TDS Telecommunications Corporation	Telephone and Data Systems, Inc.
21	West Carolina Rural Telephone Cooperative, Inc.	West Carolina Rural Telephone Cooperative, Inc.
22	Allstream	Zayo Canada Inc.
	Allstream Business US, Inc.	Zayo Group, LLC
	Zayo Group, LLC	Zayo Group, LLC



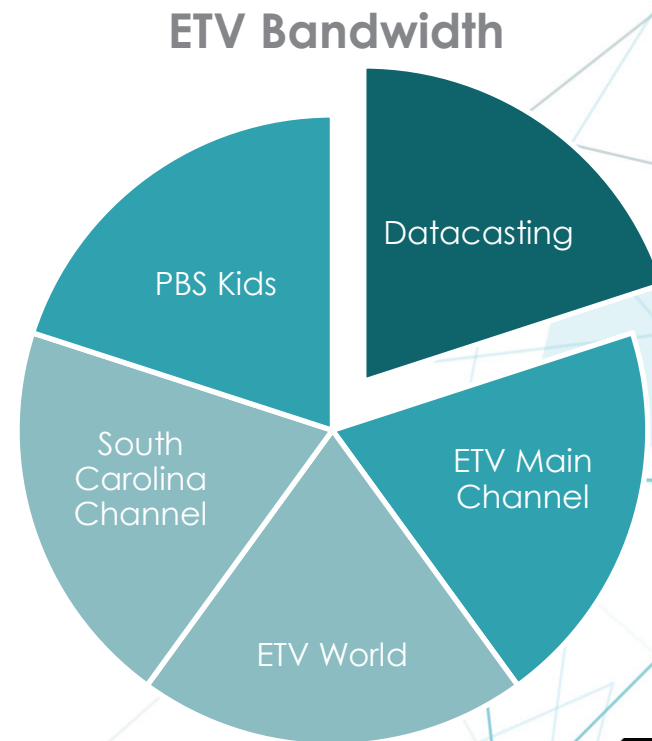
SOUTH CAROLINA'S PUBLIC BROADCASTING STATION

Bridging the Digital Divide: An Educational Datacasting Pilot

**JBRC Broadband Subcommittee Update
October 20, 2020**

Datacasting Defined

Converts a portion of the ETV broadcast signal to deliver a one-way transmission of targeted, standard-aligned, curriculum content instead of a television channel

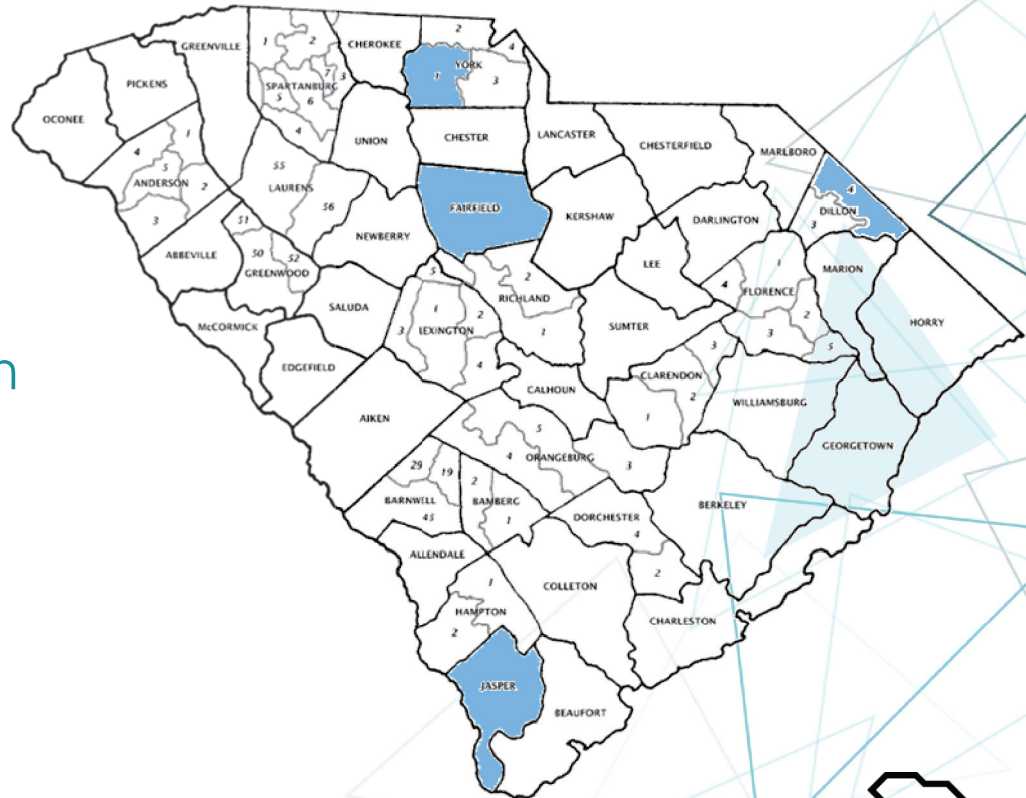


Pilot Districts – 600 Students

4 Districts Confirmed
Fairfield, Dillon 4, Jasper,
York One

Elementary, Middle, & High
School Representation

Cohort Approach to
training and professional
development





Datacasting Pilot Project
School District Memorandum of Understanding

The purpose of this Agreement is to outline the terms of partnership between South Carolina ETV (SCETV) and _____ School District (District) regarding participation in a datacasting pilot during the 2020 – 2021 academic year.

Under this agreement, District will:

- Participate in scheduled meetings during the pilot program to discuss system management and end user experience
- Establish criteria for student receipt of datacasting equipment
- Identify at least one teacher to participate in the pilot program to include:
 - o Selection of students who will receive datacasting equipment based on established criteria
 - o Attendance at schedule training on system use
 - o Participation in at least one virtual meeting to provide feedback on the system and end user experience
 - o Work with district contact and SCETV to provide feedback on student experience
 - o Provision of any additional assessment information, as determined appropriate during the pilot
- Complete two status reports, one in January 2021, the second in May/June 2021, regarding the district's pilot experience using the reporting format outlined by SCETV.
- To the extent feasible, collaborate with SCETV to increase awareness about the datacasting service through multiple communication mediums (i.e., interviews, support letters, testimonials, etc.).
- Keep device and interface user ID and passwords confidential, sharing them only with authorized staff and assigned users, as appropriate
- Assign one datacasting set per student household at any given time and maintain a completed and signed student use agreement for all assigned equipment.
- Notify SCETV of equipment anomalies by calling 1-800-277-3245 or emailing etveducation@scetv.org.
- Immediately report to SCETV the suspected loss, theft or damage of any device, and/or any unauthorized device use/access.
- Ensure appropriate care and maintenance of assigned equipment.

Under this agreement, SCETV will:

- Provide a briefing and additional training, as appropriate, on the applicable requirements, access, and use of the datacasting service.
- Provide an initial set of 30 devices, with the potential for more to be distributed as determined throughout the pilot. Ensure devices are returned upon completion of the pilot, unless further agreement has been made.
- Keep a master inventory of all equipment.
- Create content that promotes and raises awareness about the datacasting service for parents, students, and other local community stakeholders.
- Provide a content library of resources available to support instructional needs during the datacasting pilot.
- Provide technical assistance as appropriate to end users and route users to program partners for technical support as necessary.
- Develop, administer, and maintain an assessment plan for all pilot participants.
- Use any legal and appropriate measures to prevent, investigate, and mitigate any attempts or actions to damage or steal equipment.

Terms of Agreement and Signatures

This agreement is effective _____ through _____.
Either party has the right to terminate this agreement with a 30-day advance notice. The agreement will be revisited on an annual basis for revisions as appropriate as the datacasting program progresses.

Printed Name, District Representative

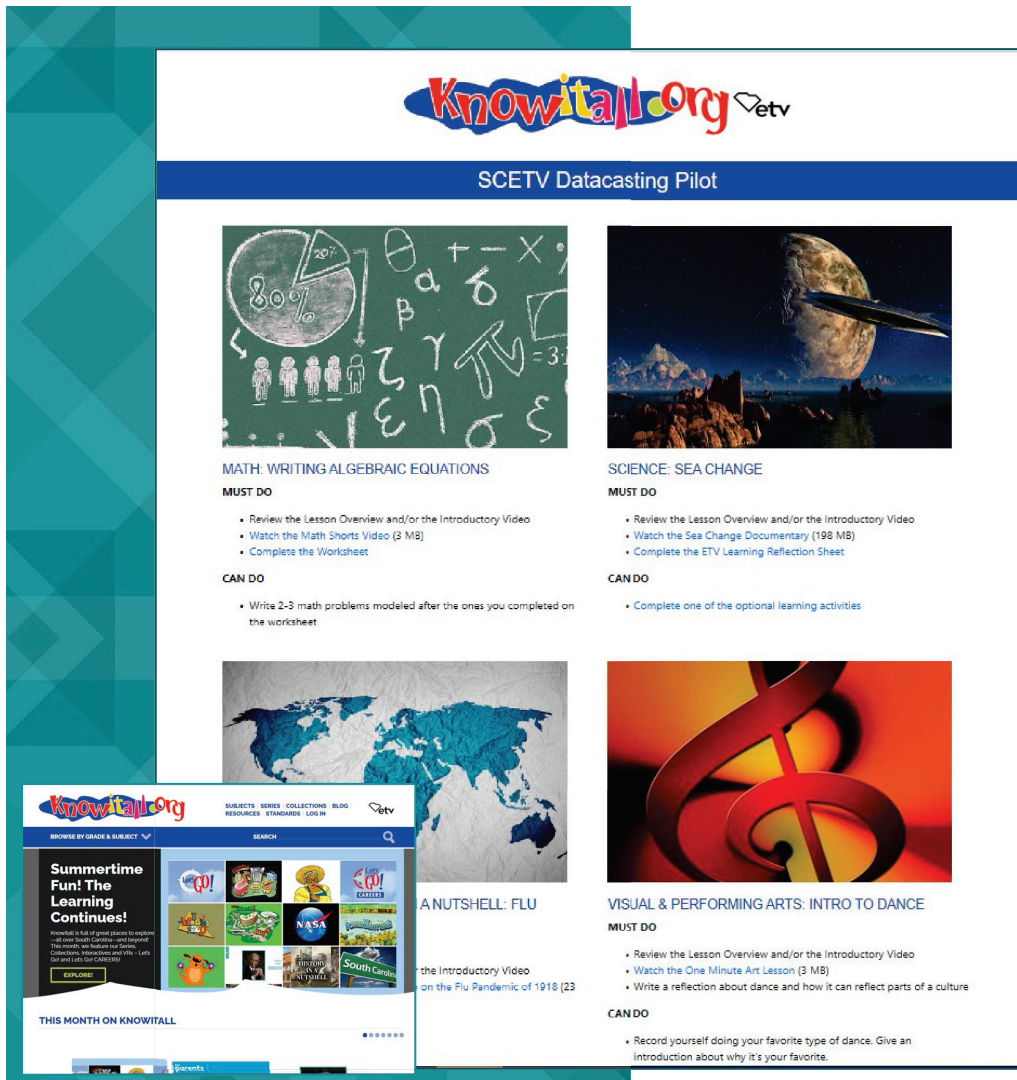
Date

Title/Position

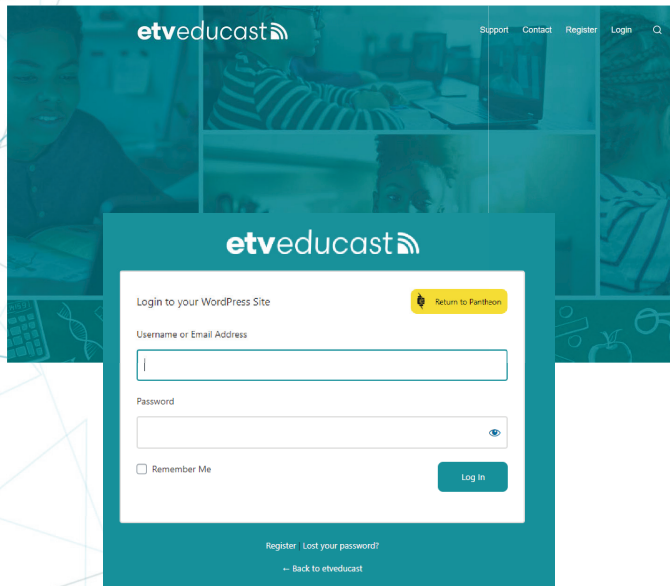
Signature

Dr. Stephanie Frazier
Vice President of Education, South Carolina ETV

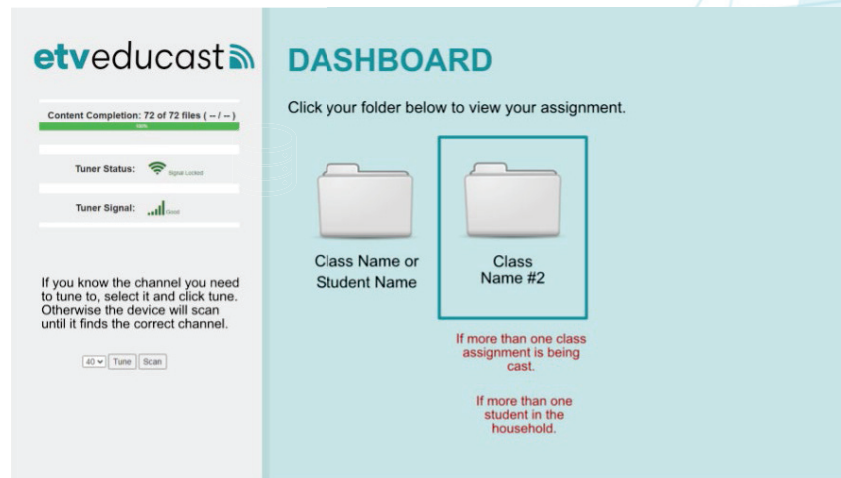
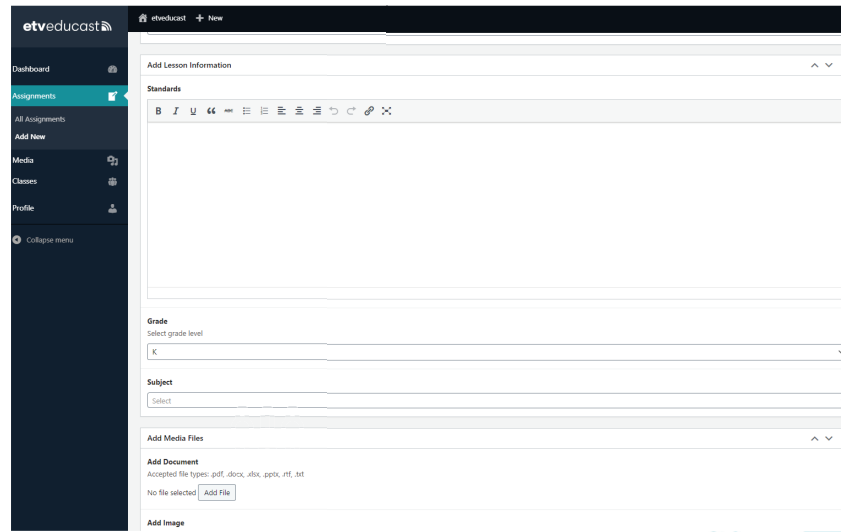
Date



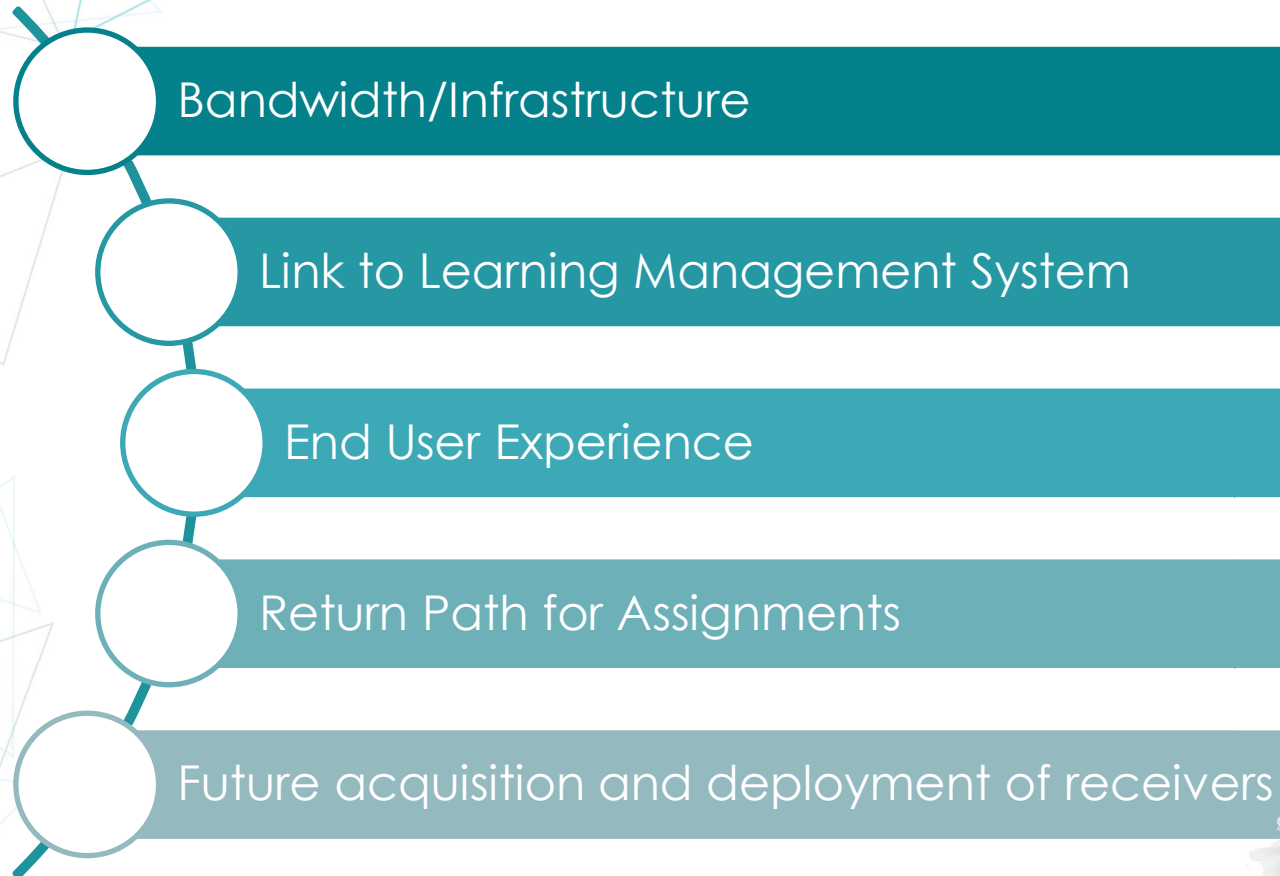
- Prototype for initial testing
- Mirrors HTML web page utilizing familiar ETV Brand – Knowitall.org
- Packaged lessons based on core content areas, in addition to Arts and CTE
- Personalized learning experience – tells the student what he/she must do and can do
- Includes various file types



Teacher and student interface – as of 10/13/20 – design constantly evolving

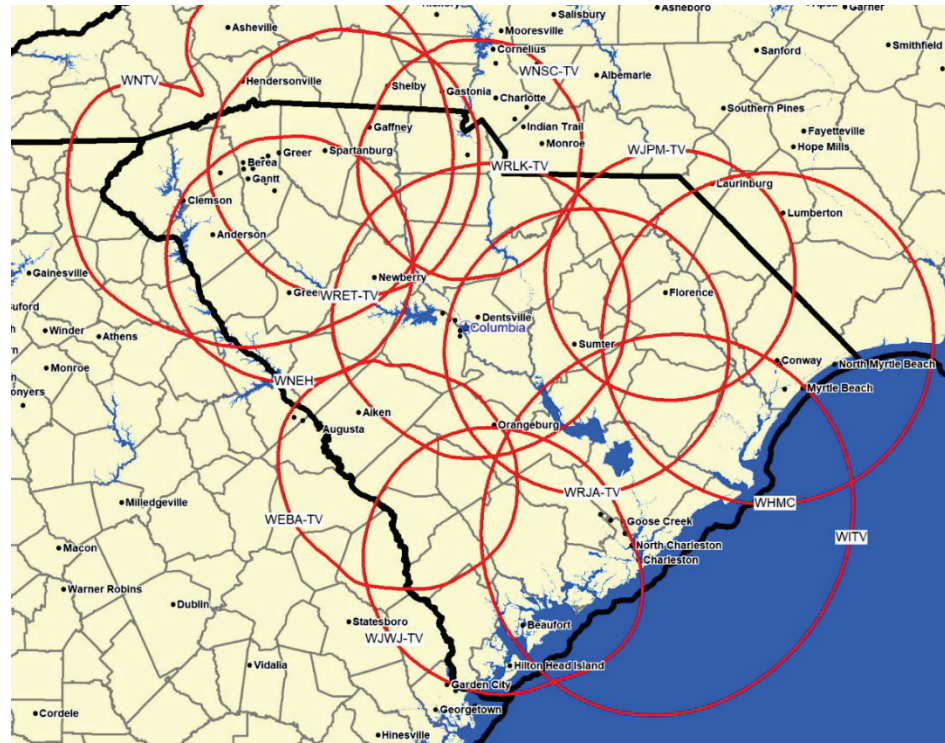


Exploratory Issues



ETV Coverage Area

SCETV currently
covers **98%**
of the state



Questions?

scetv.org/datacasting

Anthony Padgett
President/CEO
apadgett@scetv.org

Dr. Stephanie Frazier
Vice President of Education
sfrazier@scetv.org



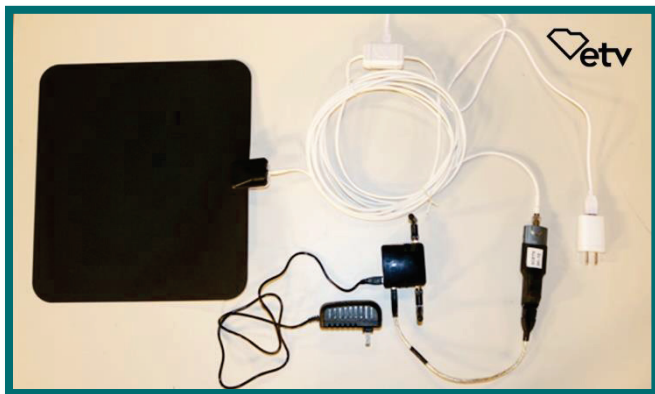
Datacasting Update

Datacasting technology supports the one-way transmission of instructional content.

Total Funds Received: \$3.7 million

South Carolina ETV (SCETV) received **\$2.4 million** from the SC Department of Education as part of the federal Rethink K12 Education grant. These funds will support the end user experience (training, receivers, etc.)

SCETV received **\$1.3 million** through the Governor's COVID-19 Response Fund. These funds will support the expansion of infrastructure (gateways, encoders, etc.).



Datacasting pilot in **4 districts** with a goal of scaling to serve **3,000 - 5,000** students this academic year.



Students will have receivers in their homes by early November.

ETV Staff and SC Education stakeholders package standard-aligned content.

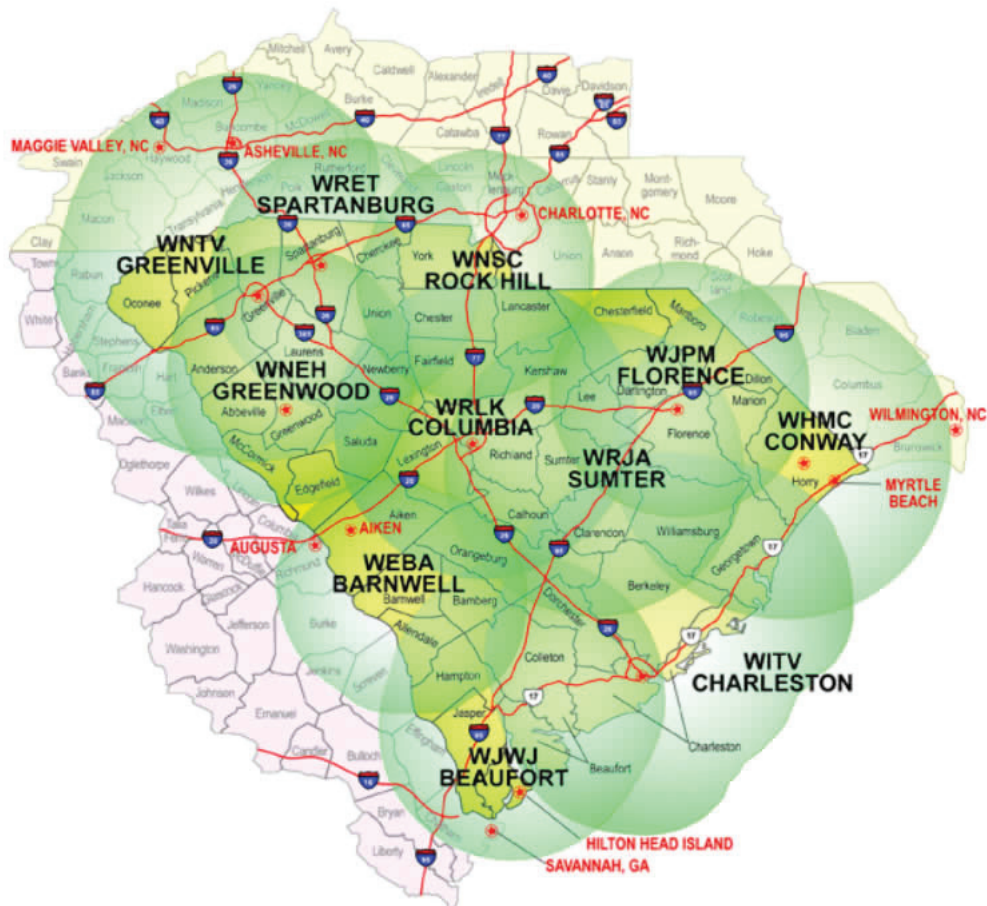


Content is encrypted and sent to ETV network over a secured signal.



Content is transmitted over secured signal to student device for consumption.

Find additional information visit
<https://www.scetv.org/datacasting>



ETV reaches into 8 DMAs, including 5 of the top 100:

- | | | |
|------------------------------------|--------------------|----------------------------|
| #22 Charlotte, NC | #77 Columbia, SC | #102 Myrtle Beach-Florence |
| Rock Hill: WNSC-30 | Columbia: WRLK-35 | Conway: WHMC-23 |
| #37 Greenville-Spart-Asheville-And | Sumter: WRJA-27 | Florence: WJPM-33 |
| Greenville: WNTV-29 | #91 Savannah, GA | #112 Augusta-Aiken |
| Spartanburg: WRET-49 | Beaufort: WJWJ-16 | Allendale: WEBA-14 |
| Greenwood: WNEH-38 | #94 Charleston, SC | #192 Greenwood-Greenville |
| | Charleston: WITV-7 | Greenwood: WNEH-38 |



The South Carolina ETV network includes 11 TV stations and 8 radio stations blanketing the state, as well as parts of North Carolina and Georgia.





South Carolina ETV Terrestrial Broadcast Signal Coverage
Compiled in Response to September 2020 JBRC Legislative Request

South Carolina ETV (SCETV) provides an FCC-compliant terrestrial broadcast signal to approximately 98 percent of the state. There are three counties (i.e., Chesterfield, Edgefield, and McCormick) where approximately two percent of the state does not receive a signal that meets FCC guidelines. Though the geographic area may not have coverage that meets FCC guidelines, a household in the area might still be able to receive the ETV signal with the purchase of a larger or specialized antenna.

According to the most recent census data available, this potential lack of coverage impacts an estimated **82,373 individuals** (i.e., 1.6 percent of state population). The **27 public schools** located within these three counties served a total of **10,982 students** during the 2019-20 academic year (i.e., 1.4 percent of state's public school students).

TABLE 1: SC COUNTIES WHERE SCETV TERRESTRIAL BROADCAST SIGNAL COVERAGE DOES NOT MEET FCC COMPLIANCE

County	Population	Population % under 18	Median Household Income (2014-18)	% Households w/computer, 2014-18	% Households w/broadband Internet, 2014-18	# Public Schools	# Active Students 2019-20
South Carolina	5,148,714	21.60%	\$51,015	86.20%	75.30%	1184	770923
Chesterfield County	45,650	21.80%	\$40,033	75.10%	10.10%	16	6,993
Edgefield County	27,260	17.80%	\$49,200	76.80%	63.10%	8	3,331
McCormick County	9,463	11.40%	\$42,262	77.30%	67.20%	3	658
3-County Totals	82,373	--	--	--	--	27	10,982

Specifically, there are four towns where SCETV coverage might prove especially difficult. Across these four towns, there are six schools which served 2,611 students during the 2019-20 academic year. Additional, in depth analysis is required to determine the extent of coverage availability in these areas. This group equates to four percent of the aforementioned 3-county population, and less than 1 percent of the state's total population.

TABLE 2: SC TOWNS WHERE SCETV TERRESTRIAL BROADCAST SIGNAL COVERAGE DOES NOT MEET FCC COMPLIANCE

County	Town	Town Population Size	# Public Schools	# Active Students 2019-20
Chesterfield	Pageland	2684	2	938
Edgefield	Meriwether	367	2	1,188
McCormick	Modoc	202	1	298
McCormick	Plum Branch	84	1	187
Totals		3,337	6	2,611

The ability to achieve full coverage in these areas would require federal assistance including conversations with, and guidance from, the FCC, as well as state-level support/resources.

Additional Support

In the interim, SCETV can provide support services to the families and communities in the districts including:

- Free Professional Development for Educators on Various Topics
- Free Early Childhood Programming Related to PBS and ETV Resources
- Curriculum Development Activities and Resources
- Educational Research

Additional information is available at <https://www.scetv.org/edtrainingrequest> and <https://www.scetv.org/athomelearning>.

Data Sources

- <https://www.census.gov/quickfacts/fact/table/chesterfieldcountysouthcarolina/PST045219>
- <https://www.census.gov/quickfacts/fact/table/edgefieldcountysouthcarolina,US/PST045219>
- <https://www.census.gov/quickfacts/fact/table/mccormickcountysouthcarolina,US/PST045219>
- <https://www.census.gov/quickfacts/fact/table/SC,US/PST045219>
- <https://ed.sc.gov/data/other/student-counts/active-student-headcounts/>
- https://www.scetv.org/sites/default/files/documents/sponsorship/tvmap1pg_062117.pdf

Contact Information

- **Anthony Padgett**
President and CEO
803.737.3240 | apadgett@scetv.org
- **Stephanie Frazier**
Vice President of Education
803.737.3528 | sfrazier@scetv.org



S.C. DEPARTMENT OF COMMERCE Broadband Grant Program Proposal

Background

In the 2019-20 Legislative Session, Proviso 50.21 was passed which established within the S.C. Department of Commerce the *Rural School District and Economic Development Closing Fund*. The \$65 million fund is to be used to facilitate economic development and infrastructure improvements in counties as outlined within the proviso (proviso language and map of eligible county follow). **S.C. Commerce is seeking to use a significant portion of these funds to create a broadband grant program.**

The Office of Regulatory Staff (ORS) has recently completed a series of broadband grants, using CARES Act Funds, totaling \$26.1 million. This represents more than 80 grant recipients and 13 providers. The largest grant application request was \$1.9 million in funds; the smallest request was \$340,000. ORS believes the requests were relatively small due to the short time frame allotted to complete the project.

There are key elements from ORS' program that will aid S.C. Commerce in a Broadband Grant Program. Specifically, the manner in which ORS completed the challenge period, grant application, scoring process and procurement of a broadband map and cost model for the state.

ORS contracted with CostQuest Associates for the creation of a statewide broadband mapping program and cost model. The mapping, to be completed in late November, will show the availability of broadband service at the address level. This map will be built using data from providers and will be more up-to-date than other maps currently available. CostQuest will also provide an economic model that will help the state understand the cost to bring broadband service to an area.

Draft Process: S.C. Commerce Broadband Grant Program

- Using CostQuest maps, S.C. Commerce would overlay additional data to show areas where broadband service could make the most impact. Additional data used may include areas with a high propensity for future industrial development (incorporating buildings and sites data) and would also include social factors such as schools, healthcare and community gathering points. The areas that show more potential need for broadband would become "priority" areas. Priority areas could be tiered.
 - Currently, funding is restricted to the 14 counties identified by Proviso 50.21.
 - Additionally, up to \$15 million of the \$65 million in total funding can be used in 15 contiguous counties. Thus, it is possible to reach 39 S.C. counties (see attached map).



Continued Draft Process: S.C. Commerce Broadband Grant Program

- These priority maps would be published online, and the challenge period would follow. This challenge period would allow providers an opportunity to dispute any areas designated on the maps as unserved areas. Documentation from the disputer would be reviewed. Any area(s) deemed to be served would be removed from eligibility.
- Final priority areas would be published online. Grant applications would be made available to serve published areas.
- Grant applications, once received, along with a map of proposed service areas, would be published online – while applications are scored and verified. Challenges must occur in the challenge stage noted above; however, this step provides maximum transparency and allows elected officials and communities the opportunity to review applications prior to awards.
- Grant applications will be scored using a predetermined, weighted scoring system. Elements that may be included in the scoring include: time to complete project, community support, adoption strategies, tiered rates and program for low-to-moderate income subscribers, etc.
- Grant awards will be made based on top scoring applications until funding is fully subscribed.
- Final grant awards will be published online.
- Grant monitoring and reporting will be implemented along with financial controls.

Timing

The CostQuest maps are to be completed by late November. After allowing time to review the maps, create priority maps and integrate the cost model into the priority maps, we anticipate the challenge period can commence in early January, 2021. From that point, it is anticipated that it would take four (4) to eight (8) weeks to make awards.



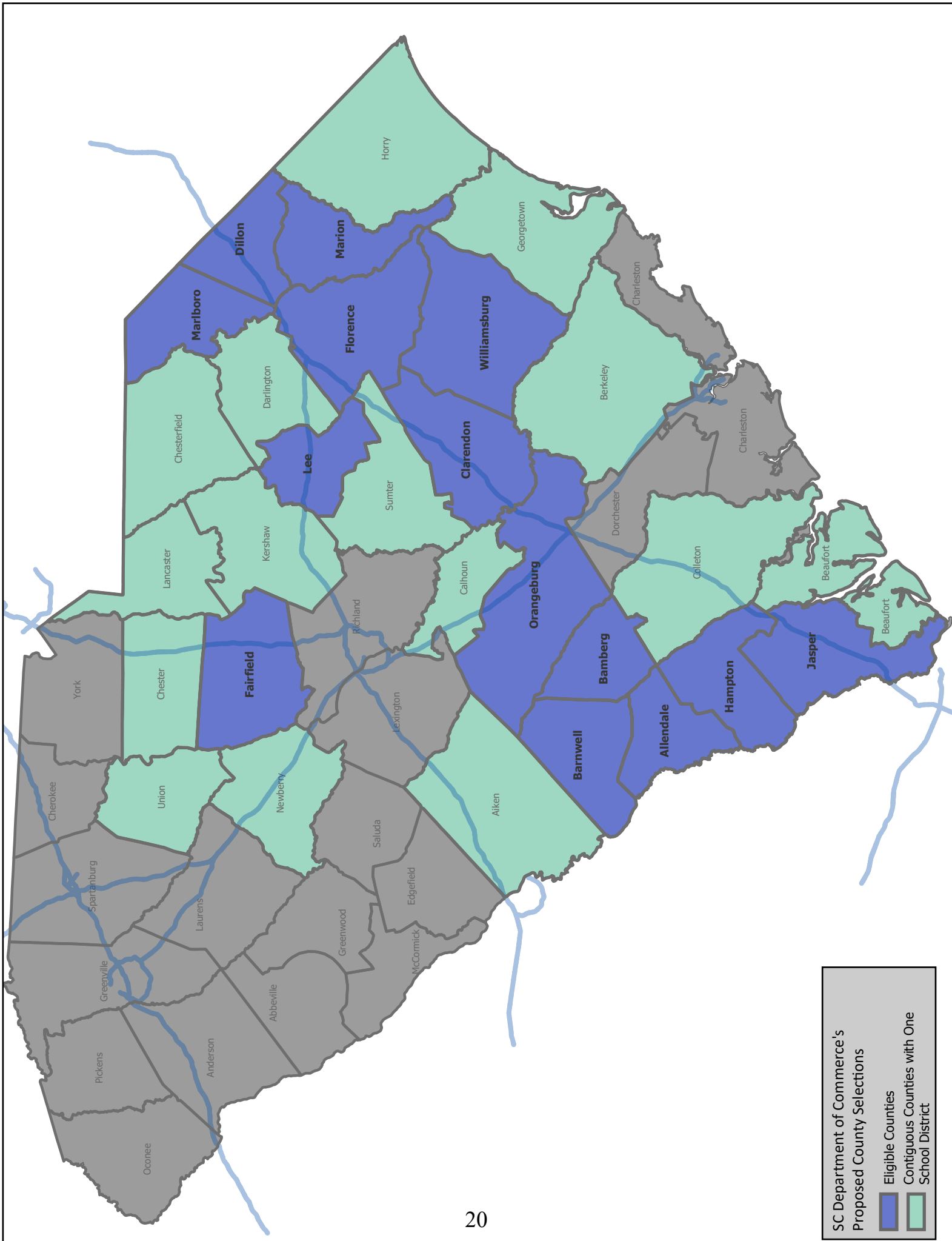
Collaboration with the Office of Regulatory Staff

ORS is in the award phase of its Broadband Infrastructure Program, utilizing funding from the CARES Act. A partnership between S.C. Commerce and ORS could be synergistic and allow the state to continue broadband development without an additional funding commitment. S.C. Commerce will leverage its community relationships, grant program experience and funding from Proviso 50.21; ORS could provide:

- *Process Assistance* – using the recent Broadband Infrastructure Program, refine ORS’ process and learn from ORS’ experience to update the grant application, process and scoring.
- *Technical Expertise* – relying on ORS’ longevity, experience and knowledge working in the telecommunications industry, leverage their knowledge to navigate industry issues and build relationships with providers. ORS’ technical expertise would be invaluable with:
 - Scoring and verification of grant applications;
 - Navigating disputed service areas.
- *Mapping Assistance* – ORS will manage and maintain the State Broadband Map. S.C. Commerce would work with ORS to create and publish maps as outlined in the process above. Additionally, ORS would update the State Broadband Map as new service areas are added with grant funds.

Proviso 50.21 (CMRC Development – Funding for Rural Infrastructure):

There is established within the Department of Commerce the Rural School District and Economic Development Closing Fund. (A)The Secretary of Commerce shall use the fund to facilitate economic development and infrastructure improvements in counties that contain a school district that has been defined by the Department of Education as having a poverty rate greater than or equal to 86%. (B)The Secretary of Commerce shall use the fund to facilitate economic development and infrastructure improvements in counties that meet each of the following criteria: (1) one of the top twelve counties in South Carolina with the highest population decline (by percentage) since 2010; (2) one of the top twelve counties with the highest average employment rate for 2018; and (3) according to the US Census 2017 - a county with a poverty rate in excess of twenty percent. Funds are to be used on, but not limited to, economic development projects, water and sewer infrastructure, and school building infrastructure. Once a project is committed, the funds may be utilized to finish that specified project, even if the county does not remain an eligible county in subsequent years. This plan must be reviewed by the Joint Bond Review Committee before these funds may be expended. Of the funds transferred to the fund, up to \$15,000,000 may be used in any county that is contiguous to an eligible county as long as that contiguous county has one county-wide consolidated public school district. Any unexpended funds at the end of the fiscal year shall be carried forward and expended in the current fiscal year by the Department of Commerce for the same purposes.



SC Department of Commerce's
Proposed County Selections

	Eligible Counties
	Contiguous Counties with One School District